

In the Claims:

Please amend the claims as follows. No new matter is introduced.

1. (Currently Amended) A method of specifying an animation by a computer via a text description, comprising the steps of:

loading a first image into an animation author for display on a display screen;
entering an animation object into said animation author;
entering into said animation author an animation path for said animation object
from a starting position to an end position; ~~and~~

entering into said animation author a playback speed for playback of said
animation; and

_____ saving said animation as a Standardized Generalized Markup Language (SGML)
file comprising an animation style, wherein said SGML file can be loaded into an
animation player adapted for playing said animation.

2. (Original) The method of claim 1, comprising repeating ~~foregoing said~~
~~steps for each animation object of said animation~~ of entering an animation object,
entering an animation path; and entering a playback speed into said animation author.

3-4. (Canceled)

5. (Original) A method for specifying animation as recited in claim 1,
comprising the steps of:

calculating a new orientation for said animation object as a function of position of
said animation object on said animation path; and

orienting said animation object to said new orientation during said animation.

6. (Original) A method for specifying animation as recited in claim 5,
wherein said step of calculating a new orientation comprises:

representing said animation path as a series of points;

at each given sampling point, calculating a deviation by comparing coordinates of said given sampling point with coordinates of the next sampling point of said series; comparing said deviation with a predetermined limit; and recalculating said orientation whenever said deviation exceeds said predetermined limit.

7. (Original) A method for specifying animation as recited in claim 1, comprising the steps of:

forming a bounding box for said animation object;
calculating a new orientation for said boundary box as a function of position of said animation object on said animation path; and
orienting said boundary box to said new orientation during said animation.

8. (Original) A method for specifying animation as recited in claim 7, wherein said step of calculating a new orientation comprises:

representing said animation path as a series of points;
at each given sampling point, calculating a deviation by comparing coordinates of said given sampling point with coordinates of the next sampling point of said series; comparing said deviation with a predetermined limit; and
recalculating said orientation whenever said deviation exceeds said predetermined limit.

9. (Canceled)

10. (Original) A method for specifying animation as recited in claim 1, comprising the steps of:

specifying said animation to play in one of:
(a) a normal mode; and
(b) a scheduling mode.

11. (Original) A method for specifying animation as recited in claim 10, wherein said step of specifying said animation to play in said normal mode comprises:
specifying a playing pace for said animation for causing said animation to play at its own specified pace substantially independently of any other animation objects.

12. (Original) A method for specifying animation as recited in claim 10, wherein said step of specifying said animation to play in said scheduling mode comprises:

specifying a playing pace for said animation for causing said animation to play at a synchronized pace based on a user specification.

13-15. (Canceled)

16. (Original) A method for specifying animation as recited in claim 1, wherein said step of entering an animation object comprises:

entering said animation object into an animation array;

17. (Original) A method for specifying animation as recited in claim 16, wherein said step of entering an animation object comprises:

storing properties associated with said animation object in said animation array.

18. (Original) A method for specifying animation as recited in claim 16, wherein said step of entering an animation object comprises:

modifying, when necessary, said animation object in said animation array.

19-21. (Canceled)

22. (Original) A method for specifying animation as recited in claim 1, wherein said step of entering an animation object comprises:

entering first and second paths for composing a pipe; and

specifying a fill-in color form said pipe.

23. (Original) A method for specifying animation as recited in claim 22, wherein said step of entering into said animation author an animation path comprises:
specifying said starting position and said ending position as a beginning point and an end point for said pipe, respectively.

24. (Original) A method for specifying animation as recited in claim 23, wherein said animation is specified such that said animation starts at beginning point and ends at said end point for said pipe.

25. (Original) A method for specifying animation as recited in claim 1, comprising:
specifying a default condition for said animation object to have a pre-condition and a post-condition;
specifying a default condition for said animation object such that said pre-condition and said post-condition are null initially; and
specifying a default condition for said animation object to have statuses of READY, RUN, and DONE.

26. (Original) A method for specifying animation as recited in claim 25, comprising:
scheduling said animation by an algorithm that checks each entry of an object in said animation array and starts said object when its pre-condition is satisfied and signals said object in its post-condition.

27. (Currently Amended) A method of specifying an animation by a text description, comprising the steps of:
interactively entering an animation object into an animation authoring tool;
entering an animation path for said object; ~~and~~
specifying animation of said object with object orientation as a function of said animation path; and

saving said animation as a Standardized Generalized Markup Language (SGML) file, wherein said SGML file comprises an animation style that can be loaded into an animation player adapted for playing said animation.

28. (Currently Amended) A method for specifying animation by a text description, comprising the steps of:

interactively entering an animation object comprising a pipe into an animation authoring tool;

specifying a fill color for said pipe; ~~and~~

specifying said fill color to start filling said pipe at a beginning point thereof at the start of said animation and to fill said pipe to an ending point thereof at the end of said animation; and

saving said animation as a Standardized Generalized Markup Language (SGML) file, wherein said SGML file comprises an animation style that can be loaded into an animation player adapted for playing said animation.

29. (Currently Amended) A method of specifying an animation by a text description, comprising the steps of:

interactively entering a plurality of animation objects into an animation array in an animation authoring tool;

sorting properties associated with each of said animation objects in said animation array, including pre-conditions and post-conditions; ~~and~~

scheduling said animation by an algorithm that checks each entry of an object of said plurality in said animation array and starts said object when its pre-condition is satisfied and signals said object in its post-condition; ; and

saving said animation as a Standardized Generalized Markup Language (SGML) file comprising an animation style, wherein said SGML file can be loaded into an animation player adapted for playing said animation.

30. (Currently Amended) ~~Apparatus comprising a computer means~~ A program storage device readable by a computer, tangibly embodying a program of instructions

executable by the computer to perform the method steps for providing animation of an animation object by means of a text description, by the functions including comprising:

- interactively entering an animation object into an animation authoring tool;
- entering an animation path for said object;
- specifying animation of said object with object orientation as a function of said animation path;
- selectively entering a pipe animation object into an animation authoring tool;
- specifying a fill color for said pipe;
- specifying said fill color to start filling said pipe at a beginning point thereof at the start of said animation and to fill said pipe to an ending point thereof at the end of said animation;
- selectively entering a plurality of animation objects into an animation array in an animation authoring tool;
- sorting properties associated with each of said animation objects in said animation array, including pre-conditions and post-conditions; ~~and~~
- scheduling said animation by an algorithm that checks each entry of an object of said plurality in said animation array and starts said object when its pre-condition is satisfied and signals said object in its post-condition; and
- saving said animation as a Standardized Generalized Markup Language (SGML) file comprising an animation style, wherein said SGML file can be loaded into an animation player adapted for playing said animation.

31. (Currently Amended) Apparatus comprising a computer means for providing animation of an animation object by means of a text description including:

- means for interactively entering an animation object into an animation authoring tool;
- means for entering an animation path for said object;
- means for specifying animation of said object with object orientation as a function of said animation path;
- means for selectively entering a pipe animation object into an animation authoring tool;

means for specifying a fill color for said pipe;

means for specifying said fill color to start filling said pipe at a beginning point thereof at the start of said animation and to fill said pipe to an ending point thereof at the end of said animation;

means for selectively entering a plurality of animation objects into an animation array in an animation authoring tool;

means for sorting properties associated with each of said animation objects in said animation array, including pre-conditions and post-conditions; ~~and~~

means for scheduling said animation by an algorithm that checks each entry of an object of said plurality in said animation array and starts said object when its pre-condition is satisfied and signals said object in its post-condition; and

means for saving said animation as a Standardized Generalized Markup Language (SGML) file comprising an animation style, wherein said SGML file can be loaded into an animation player adapted for playing said animation.

32. (Currently Amended) Apparatus comprising a computer means for specifying an animation via a text description comprising:

means for loading a first image into an animation author for display on a display screen;

means for entering an animation object into said animation author;

means for entering into said animation author an animation path for said animation object from a starting position to an end position; ~~and~~

means for entering into said animation author a playback speed for playback of said animation; and

means for saving said animation as a Standardized Generalized Markup Language (SGML) file comprising an animation style, wherein said SGML file can be loaded into an animation player adapted for playing said animation.